#### SUBMIT IN TRIPLICATE\*

(Other instructions on reverse side)

Form approved. Budget Bureau No. 42-R1425.

978

DATE \_

## **UNITED STATES**

|  | DEPARTMEN                            |               | NTERIOR             | reverse s      | ide)                             | 30 - 039 - 21691<br>5. LEASE DESIGNATION AND SEBIAL NO.     |  |  |
|--|--------------------------------------|---------------|---------------------|----------------|----------------------------------|---|--|--|
|  | GEOL                                 | OGICAL SURV   | EY                  |                |                                  | SF 078498   |  |  |
| APPLICATION  | N FOR PERMIT                         | TO DRILL,     | DEEPEN, OR          | PLUG E         | BACK                             | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME                        |  |  |
| 1a. TYPE OF WORK   |                                      | •             |                     |                |                                  |   |  |  |
| b. TYPE OF WELL  | ILL 🖺                                | DEEPEN        |                     | PLUG BA        | CK 🗌                             | 7. UNIT AGREEMENT NAME San Juan 28-7 Unit                   |  |  |
| OIL G.   | AS OTHER                             |               | SINGLE X            | MULTIP<br>Zone | LE                               | 8. FARM OR LEASE NAME                                       |  |  |
| 2. NAME OF OPERATOR  |                                      |               |                     |                |                                  | San Juan 28-7 Unit  |  |  |
| El Paso Nat  | tural Gas Co                         | mpany         |                     |                |                                  | 9. WELL NO.   |  |  |
| 3. ADDRESS OF OPERATOR   |                                      |               |                     |                |                                  | 192   |  |  |
| PO Box 990   | , Farmington                         | , NM 8740     | 01                  |                |                                  | 10. FIELD AND POOL, OR WILDCAT                              |  |  |
| 4. LOCATION OF WELL (R   | Ž                                    |               | th any State requir | ements.*)      |                                  | Basin Dakota 🗸  |  |  |
| At surface 936'N, 990'W At proposed prod. zone   |                                      |               |                     |                |                                  | 11. SEC., T., B., M., OR BLK.  Sec. 33, 1-28-N, R-7-W  NMPM |  |  |
| 14. distance in miles .<br>15 miles SI   | E of Blanco,                         |               | T OFFICE*           |                |                                  | 12. COUNTY OR PARISH   13. STATE Rio Arriba   NM            |  |  |
| 15. DISTANCE FROM PROPOSED*  LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig, unit line, if any) |                                      |               |                     |                |                                  | F ACRES ASSIGNED HIS WELL 316.0 ✓                           |  |  |
| <ol> <li>DISTANCE FROM PROP<br/>TO NEAREST WELL, D<br/>OR APPLIED FOR, ON TH</li> </ol>                                | RILLING, COMPLETED,<br>IS LEASE, FT. | 400'          | 19. PROPOSED DEI    | тн<br>'41'     | 20. ROTARY OR CABLE TOOLS ROtary |   |  |  |
| 21. ELEVATIONS (Show who   | ether DF, RT, GR, etc.)              |               |                     |                | <del>.</del>                     | 22. APPROX. DATE WORK WILL START*                           |  |  |
| 23.  |                                      | PROPOSED CASI | NG AND CEMENT       | ING PROGRA     | AM                               |   |  |  |
| SIZE OF HOLE   | SIZE OF CASING                       | WEIGHT PER F  | OOT SETTI           | G DEPTH        | 1                                | QUANTITY OF CEMENT  |  |  |
| 13 3/4"  | 9 5/8"                               | 32.3#         | 2                   | 00'            | 224 cu.ft. to circulate          |   |  |  |
| 8 3/4"   | 7"                                   | 20.0#         | 3.5                 | 45'            | 268 cu.ft.to cover Ojo Al        |   |  |  |
| 6 1/4"   | 4 1/2"                               | 10.5#&11.     | 6# 77               | 41'            |                                  | u.ft.to fill to 3545'                                       |  |  |
|  | I                                    | I             | i                   |                | 1                                |   |  |  |

Selectively perforate and sandwater fracture the Dakota formation.

| A 3000 psi WP and 6000 psi tes<br>blind and pipe rams will be us                               | st double gate preventer equipped with sed for blow dut prevention on this well.  |
|--|---|
| This gas is dedicated.   | APR 7 1978 OIL CON. COM. DIST. 3  |
| The $W/2$ of Section 33 is dedic   | cated to this well % S. GEOLOGICAL SURVEY   |
| zone. If proposal is to drill or deepen directionally, give perting preventer program, if any. | deepen or plug back, give data on present productive zone and proposed new productive nent data on subsurface locations and measured and true vertical depths. Give blowout |
| SIGNED D. G. GUCCO   | Drilling Clerk March 30, 19   |

CONDITIONS OF APPROVAL, IF ANY:

PERMIT NO. \_\_\_

APPROVED BY \_

(This space for Federal or State office use)

TITLE .

APPROVAL DATE \_\_\_

## NEW .XICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102 Supersedes C-128 Effective 1-1-65

All distances must be from the outer boundaries of the Section.

| Operator EL .             | PASO NATURAL (   | LAS COMPANY                                      | Legse<br>SAN JUAN 28                  | 3-7 UNIT (S    | SF-078498)                                    | Well No. <b>J.92</b>   |  |  |
|---------------------------|--|--|---------------------------------------|----------------|---|--|--|--|
| Unit Letter D             | Section 33   | Township 28-N                                    | Range 7-W                             | County         | RIO ARRIBA                                    |  |  |  |
| Actual Footage Loc<br>936 | feet from the  | NORTH line and                                   | 990                                   | feet from the  | WEST  | line   |  |  |
| Ground Level Elev. 6652   | 1  | mation<br>DAKOTA                                 | Pool<br>BASIN                         | DAKOT A        | <b>V</b>                                      | 316.00 Acres   |  |  |
| 1. Outline th             | ne acreage dedica  | ted to the subject w                             | ell by colored pen                    | cil or hachure | marks on the                                  |  |  |  |
|                           | 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). |  |                                       |                |   |  |  |  |
|                           |  | ifferent ownership is<br>mitization, force-pooli |                                       | ell, have the  | interests of a                                | ll owners been consoli-  |  |  |
| X Yes                     | No If a  | nswer is "yes;" type o                           | f consolidation <u>U</u>              | nitizatio      | on  |  |  |  |
|                           | is "no," list the  | owners and tract desc                            | riptions which hav                    | ve actually be | en consolidate                                | ed. (Use reverse side of   |  |  |
| No allowa<br>forced-poo   | ble will be assign   |  |                                       |                |   | unitization, unitization, pproved by the Commis-   |  |  |
| sion.                     |  | **************************************           | · · · · · · · · · · · · · · · · · · · |                | <u> </u>                                      | CERTIFICATION  |  |  |
| 990,                      | 386  |  |                                       |                | I hereby cer<br>tained herein<br>best of my k | tify that the information con- n is true and complete to the spowledge and belief.   |  |  |
| <b></b>                   | +  |  | <del></del>                           |                | Drilling                                      | Clerk  |  |  |
|                           | į  |  | 11.17                                 |                | <del></del>                                   | Natural Gas  |  |  |
|                           | SF <b>-07</b> 8498   |  |                                       |                | March 30                                      | , 1978   |  |  |
|                           |  | SECTION 33                                       |                                       |                | Date  | · · · · · · · · · · · · · · · · · · ·  |  |  |
|                           | <br> <br> <br> <br> <br> <br>  |  |                                       |                | shown on thi<br>notes of act<br>under my su   | ertify that the well location is plat was plotted from field tual surveys made by me or pervision, and that the same correct to the best of my and belief. |  |  |
|                           | <br>   |  | in it 4 1978                          |                | Date Surveyed JANUA                           | RY 5, 1973   |  |  |
|                           |  | ×  | GEOLOGICAL SURVE                      | Ą              | <del></del>                                   | etessional Engineer<br>urveyor   |  |  |
| 0 330 660                 | 90 1320 1650 196   | 30 2310 2640 200                                 | 1500 1000                             | 500 0          | Cedie 140.                                    | 1760<br>   |  |  |



# Multi-Point Surface Use Plan San Juan 28-7 Unit #192

- 1. Existing Road Please refer to Map No. 1 which shows the existing roads. New roads which will be required have been marked on this map.

  All existing and new roads will be properly maintained during the duration of this project.
- 2. Planned Access Roads Please refer to Map No. 1. The grade of the access roads will be consistent with that of the local terrain. The road surface will not exceed twenty feet (20') in width. Upon completion of the project, the access road will be adequately drained to control soil erosion. Drainage facilities may include ditches, water bars, culverts or any other measure deemed necessary by trained Company personnel to insure proper drainage. Gates and/or cattleguards will be installed if necessary.
- 3. Location of Existing Wells Please refer to Map No. 2
- 4. Location of Tank Batteries, Production Facilities, and Production Gathering and Service Lines Please refer to Maps No. 1 and No. 2.

  Map No. 2 shows the existing gas gathering lines. Map No. 1 shows the existing roads and new proposed access roads. All known production facilities are shown on these two maps.
- 5. Location and Type of Water Supply Water for the proposed project will be obtained from a water hole located Section 15-27-7 (Goulds Pass Water Well)
- 6. Source of Construction Materials No additional materials will be required to build either the access road or the proposed location.

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S. AFOLOGICAL SURVEY

- 7. Methods of Handling Waste Materials - All garbage and trash materials will be put into a burn pit shown on the attached Location Plat No. 1. When clean-up operations are begun on the proposed project, the burn pit with its refuse will be buried to a depth of at least three feet (3'). A latrine, the location of which is also shown on Plat No. 1 will be provided for human waste. If large amounts of liquids are left in the reserve pit after completion of the project, the pit will be fenced until the liquids have had adequate time to dry. The location clean-up will not take place until such time as the reserve pit can be properly covered over to prevent run-off from carrying any of these materials into the watershed. No earthen pit will be located on natural drainages; all earthen pits will be so constructed as to prevent leakage from occurring.
- 8. Ancillary Facilities No camps or airstrips will be associated with this project.
- 9. Wellsite Layout Please refer to the attached Plat No. 1.
- 10. Plans for Restoration of the Surface After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed Mixture #1 will be used. The reseeding operation will be performed during the time period set forth by the regulatory body. The location production equipment will be painted green (Federal Standard #595-34127)
- 11. Other Information The terrain is high sandstone ledges covered with pinon and cedar trees. Deer are occasionally seen on the proposed project site.

S. OF OLD GIOAL SURVEY

- 12. Operator's Representative W. D. Dawson, Post Office Box 990, Farmington, New Mexico 87401
- 13. Certification -

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by El Paso Natural Gas Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

March 31, 1978

DCW:pb

D. C. Walker

Project Drilling Engineer

7. Walker

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ti. S. Geological Survey

### Operations Plan San Juan 28-7 Unit#192

I. Location: 936'N, 990'W, Section 35, F-28-N, R-7-W, Rio Arriba County, NM

Field: Basin Dakota Elevation: 6652'GR

#### II. Geology:

| Α. | Formation | Tops: | Surface    | San Jose      | Menefee       | 5025 <b>'</b> |
|----|-----------|-------|------------|---------------|---------------|---------------|
|    |           | _     | Ojo Alamo  | 2362'         | Point Lookout | 5488'         |
|    |           |       | Kirtland   | 2525 <b>'</b> | Gallup        | 6553'         |
|    |           |       | Fruitland  | 2981 <b>'</b> | Greenhorn     | 7385 <b>'</b> |
|    |           |       | Pic.Cliffs | 3255 <b>'</b> | Graneros      | 7437 <b>'</b> |
|    |           |       | Lewis      | 3345 <b>'</b> | Dakota        | 7601'         |
|    |           |       | Mesa Verde | 4905'         | Total Depth   | 7741          |

- B. Logging Program: GR-Ind. and GR-Density at Total Depth.
- C. Coring Program: none
- D. Natural Gauges: 4895', 5478', 6543', 7427', 7591' and at Total Depth. Also gauge any noticeable increase in gas. Record all gauges in daily drilling report and on morning report.

#### III. Drilling:

A. Mud Program: mud from surface to 3545'. Gas from intermediate casing to Total Depth.

#### IV. Materials:

| A. Casing Program | Hole Size | Depth         | Casing Size | Wt.&Grade  |
|-------------------|-----------|---------------|-------------|------------|
|                   | 13 3/4"   | 200'          | 9 5/8"      | 32.3# H-40 |
|                   | 8 3/4"    | 3545'         | 7"          | 20.0# K-55 |
|                   | 6 1/4"    | 6500 <b>'</b> | 4 1/2"      | 10.5# K-55 |
|                   | 6 1/4"    | 7741'         | 4 1/2"      | 11.6# K-55 |

B. Float Equipment: 9 5/8" surface casing - Pathfinder guide shoe (Part No. 2006-1-012).

7" intermediate casing - Pathfinder guide shoe (Part No. 1003-1-007) and Pathfinder self-fill insert float valve (Part No. 2010-6-007), 5 Pathfinder stabilizers (Part No. 107-10) every other joint above shoe. Run float two joints above shoe.

- 4 1/2" production casing Larkin geyser shoe (fig. 222) and Larkin flapper type float collar (fig. 404 M&F)
- C. Tubing: 7740' of 1 1/2", 2.9#, J-55 lord EUE tubing with a common pump seating nipple above perforated pup joint with bull plugged full joint for mud anchor on bottom.
- D. Wellhead Equipment: 3000 psi test tree. Wellhead representative to set all slips and cut off casing.

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#### V. Cementing:

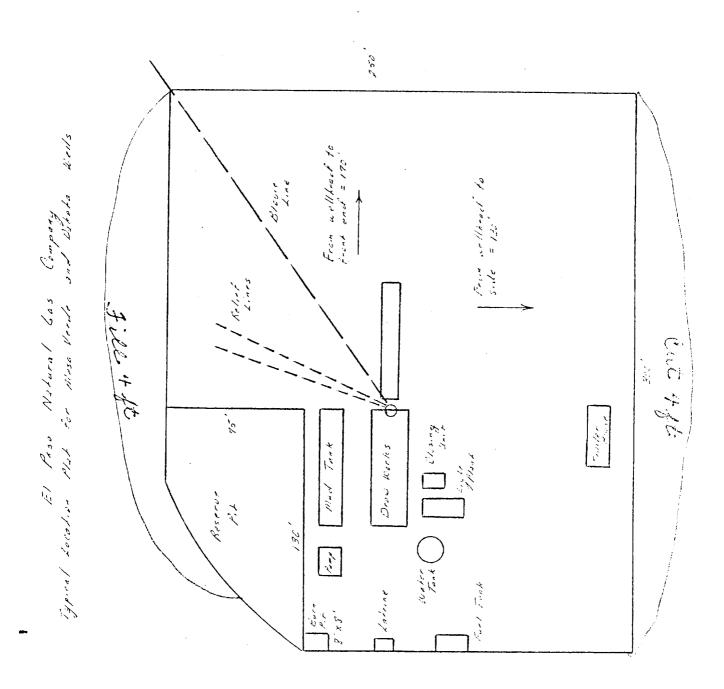
9 5/8" surface casing - use 190 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (224 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600#/30 minutes.

7" intermediate casing - use 115 sks. of 65/35 Class "B" Poz with 6% gel and 2% calcium chloride (8.3 gallons of water per sack) followed by 100 sks. of Class "B" with 2% calcium chloride (268 cu.ft. of slurry, 50% excess to cover Ojo Alamo). Run temperature survey at 8 hours. WOC 12 hours. Test casing to 1200#/30 minutes.

4 1/2" production casing - precede cement with 40 bbls. of gel water (4 sks. gel) cement with 255 sks. of Class "B" with 8% gel, 1/4 cu.ft. fine gilsonite per sack and 0.4% HR-7, followed by 100 sks. of Class "B" with 1/4# fine tuf-plug per sack and 0.4% HR-7 (654 cu.ft. of slurry, 50% excess to fill to intermediate casing). Run temperature survey at 8 hours. WOC 18 hours.

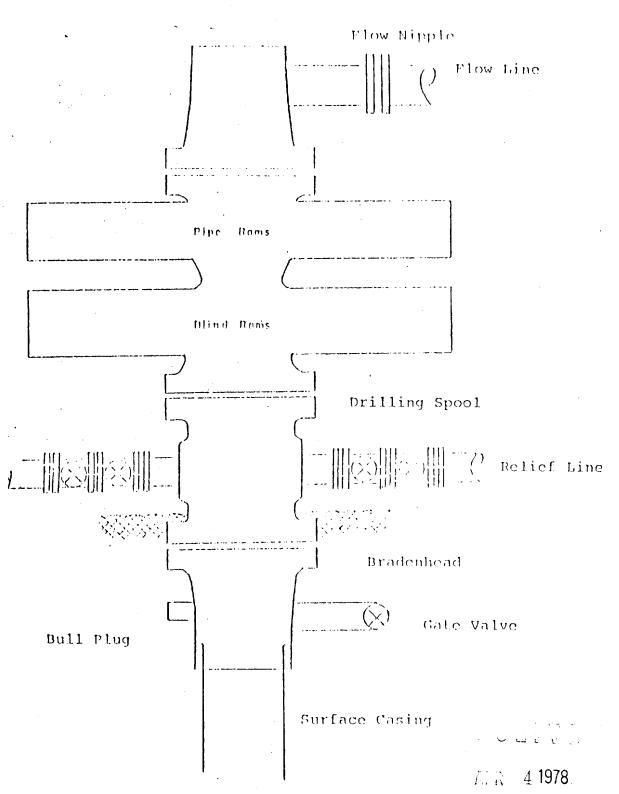
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IL S. GEOLOGICAL SURVEY



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T. S. OFOLOGICAL SURVEY

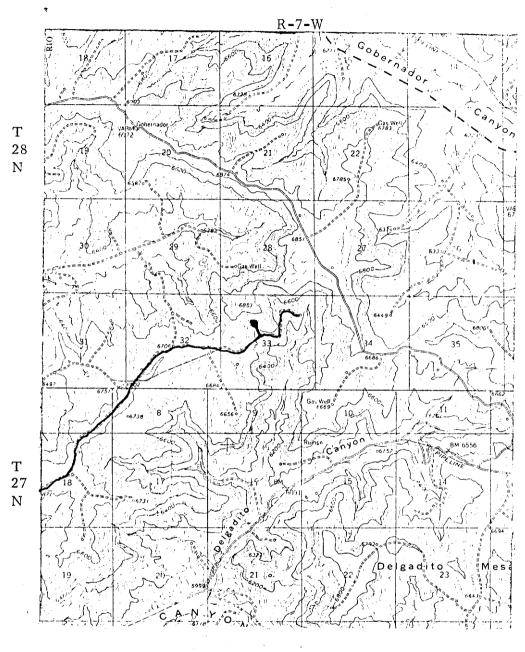


Scries 900 Double Gate BOP, rated at 3000 psi Working Pressure
When gas drilling operations begin a Shaffer

When gas drilling operations begin a Shaffer type 50 or equivalent rotating head is installed on top of the flow nipple and the flow line is converted into a blowie line.

S. OFCIOCICIA SURVEY

#### EL PASO NATURAL GAS COMPANY San Juan 28-7 Unit #192 NENW 33-28-7



MAP #1

LEGEND OF RIGHT-OF-WAYS

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" S. GERLORIANT SURVEY

EXISTING ROADS

EXISTING PIPELINES + + +

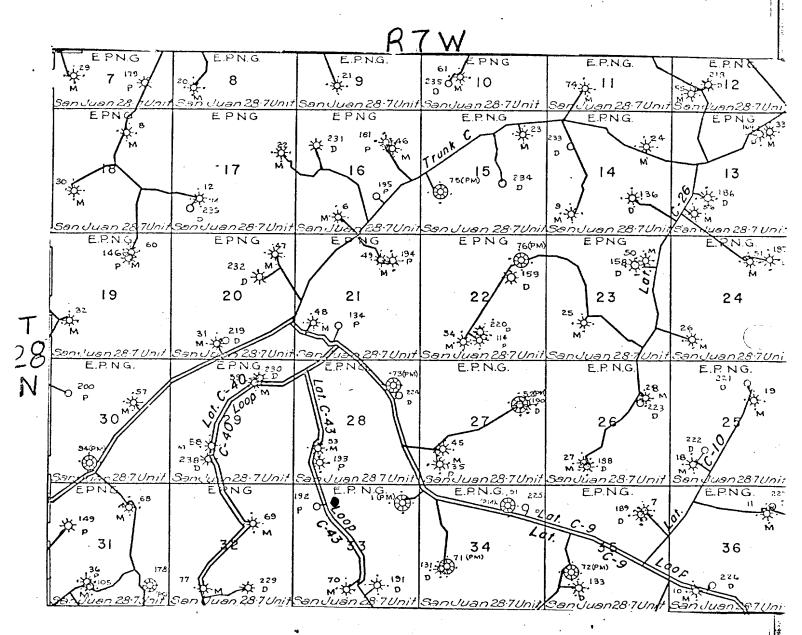
EXISTING ROAD & PIPELINE + + +

PROPOSED ROADS

PROPOSED PIPELINES + + +

PROPOSED ROAD & PIPELINE

#### EL PASO NATURAL GAS COMPANY San Juan 28-7 Unit #192 NENW 33-28-7



MAP # 2

Proposed Location

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S. GEOLOGICAL SURVEY